

09/938,227

01AB082

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application. Claims 1-24, 29 and 33-34 have been amended herein for purposes of clarity.

1. (Currently amended) A system that ~~for~~ electronically controlling a physical operation of dangerous equipment comprising:

an electronic key that ~~operable to~~ stores electronic key data;

an electronic key reader that ~~operable to~~ reads the electronic key data from the electronic key;

an electronic key data analyzer that ~~operably connected to~~ is associated with the electronic key reader, the electronic key data analyzer ~~operable to~~ analyzes the read electronic key data and ~~the electronic key data analyzer further operable to produce~~ generates a disconnect control data based, at least in part, on the electronic key data; and

a disconnecter that is associated with ~~operably connected to~~ the electronic key data analyzer and ~~operably connected to a piece of the~~ dangerous equipment, the disconnecter ~~operable to disables~~ and re-enables operation of the ~~piece of~~ dangerous equipment, based at least in part on the disconnect control data, ~~the disconnecter further operable to re-enable the operation of the piece of dangerous equipment, based at least in part on the disconnect control data.~~

2. (Currently amended) The system of claim 1, ~~wherein the disconnecter is further operable to disables~~ operation of the ~~piece of~~ equipment based on a physical lock.

3. (Currently amended) The system of claim 1, ~~wherein the electronic key reader is further operable to performs~~ at least one of logging electronic key data, logging times when the operation of the piece of dangerous equipment is disabled, logging times when the operation of the piece of dangerous equipment is enabled, logging electronic key holder medical information, logging electronic key holder tasks, logging electronic key holder identity, scheduling dangerous equipment operation, scheduling related equipment operation and performing electronic data interchange.

09/938,227

01AB082

-
4. (Currently amended) The system of claim 1, further comprising a display, the display ~~operable to presents information related to concerning~~ at least one of technical manual data, schedule data, equipment identification data, equipment status information and safety manual data.
5. (Currently amended) The system of claim 1, ~~where~~ the electronic key data comprises at least one of key identifying information, key holder identity information, key holder medical information, key holder equipment access permissions, key holder equipment qualifications, key holder supervisor contact information, key holder security information and key holder task.
6. (Currently amended) The system of claim 1, ~~where~~ the electronic key reader obtains reading the electronic key data via ~~comprises~~ at least one of reading a magnetic strip on an electronic key inserted in the electronic key reader, receiving a radio frequency signal from an electronic key in transmission range of the electronic key reader and reading digital data from an integrated circuit memory chip on an electronic key.
7. (Currently amended) The system of claim 1, ~~where the disconnecter is operable to~~ controls the flow of at least one of electricity, air, water and hydraulic fluid to the dangerous equipment.
8. (Currently amended) The system of claim 1, further comprising a computer network, the computer network is coupled ~~operably connected~~ to one or more electronic key readers, one or more electronic key data analyzers, one or more disconnectors and one or more pieces of dangerous equipment, the computer network ~~operable to carry~~ conveys a signal between one or more of the electronic key readers, the electronic key data analyzers, the disconnectors and the dangerous equipment.
9. (Currently amended) The system of claim 8, ~~wherein~~ the signal comprises at least one of electronic key data, electronic key data analysis data, equipment data and disconnect control data.

09/938,227

01AB082

-
10. (Currently amended) The system of claim 8, ~~wherein~~ further comprising one or more additional disconnectors ~~are further operable to that~~ disable operation of one or more additional pieces of dangerous equipment based on a physical lock.
11. (Currently amended) The system of claim 8, ~~wherein~~ the electronic key reader is further ~~operable to performs~~ at least one of logging electronic key data, logging times when the operation of the piece of dangerous equipment is disabled, logging times when the operation of the piece of dangerous equipment is enabled, logging electronic key holder medical information, logging electronic key holder tasks, logging electronic key holder identity, scheduling dangerous equipment operation, scheduling related equipment operation and performing electronic data interchange.
12. (Currently amended) The system of claim 8, further comprising a display, the display ~~operable to presents~~ at least one of technical manual data, schedule data, equipment identification data, equipment status information and safety manual data.
13. (Currently amended) The system of claim 8, ~~where~~ the electronic key data comprises at least one of key identifying information, key holder identity information, key holder medical information, key holder equipment access permissions, key holder equipment qualifications, key holder supervisor contact information, key holder security information and key holder task.
14. (Currently amended) The system of claim 8, ~~where~~ the electronic key reader obtains reading the electronic key data via ~~comprises~~ at least one of reading a magnetic strip on an electronic key inserted in the electronic key reader, receiving a radio frequency signal from an electronic key in transmission range of the electronic key reader and reading digital data from an integrated circuit memory chip on an electronic key.
15. (Currently amended) The system of claim 8, ~~where~~ the disconnector ~~is operable to~~ prevents the flow of at least one of electricity, air, water and hydraulic fluid to the dangerous equipment.

09/938,227

01AB082

16. (Currently amended) The system of claim 15, further comprising a central station interfaced with ~~operably connected to~~ the computer network, the central station ~~operable to that~~ disables the operation of one or more pieces of dangerous equipment and ~~to re-enables~~ the operation of one or more pieces of dangerous equipment, based, at least in part, on one or more pieces of electronic key data and/or one or more pieces of disconnect control data.

17. (Currently amended) The system of claim 16, ~~wherein~~ the central station ~~is further~~ ~~operable to~~ performs at least one of logging electronic key data, logging times when the operation of one or more pieces of dangerous equipment is disabled, logging times when the operation of one or more pieces of dangerous equipment is enabled, logging electronic key holder medical information, logging electronic key holder tasks, logging electronic key holder identities, scheduling dangerous equipment operation, scheduling related equipment operation and performing electronic data interchange.

18. (Currently amended) A computer readable medium that stores computer executable components of a system ~~for that~~ electronically ~~controlling~~ a physical operation of dangerous equipment, the system comprising:

an electronic key reading component ~~operable to that~~ reads electronic key data from an electronic key;

an electronic key data analyzing component ~~operable to that~~ analyzes the electronic key data and ~~the electronic key data analyzing component further operable to produces a disconnect control data; and~~

a disconnecting component ~~operable to that~~ disables and re-enables the operation of a piece of dangerous equipment, based at least in part on the disconnect control data, ~~the disconnecting component further operable to re-enable the operation of the piece of dangerous equipment, based at least in part on the disconnect control data.~~

19. (Currently amended) The computer readable medium of claim 18, further comprising a logging component ~~operable to that~~ logs information concerning at least one of the electronic key data, the electronic key reading component, the electronic key data analyzing component, the disconnect control data and the disconnecting component.

09/938,227

01AB082

-
20. (Currently amended) The computer readable medium of claim 19, further comprising a scheduling component ~~operable to~~ that schedules the operation of one or more pieces of dangerous equipment.
21. (Currently amended) The computer readable medium of claim 20 further comprising an EDI component ~~operable to~~ that performs electronic data interchange.
22. (Currently amended) The computer readable medium of claim 21 further comprising a central station component ~~operable to~~ that performs at least one of logging, scheduling and/or EDI for one or more electronic key reading components, electronic key data analyzing components and disconnecting components.
23. (Currently amended) A data packet adapted to be transmitted from a first computer process to a second computer process, comprising:
- disconnect data related to at least one of disabling and/or re-enabling one or more pieces of dangerous equipment, the disconnect data generated by a key analyzer in response to analysis performed on one or more pieces of electronic key data read from an electronic key by an electronic key reader.
24. (Currently amended) A method ~~for~~ that electronically ~~controlling~~ controlling a physical operation of dangerous equipment comprising:
- collecting electronic key data;
- obtaining a status of the dangerous equipment;
- locally analyzing the electronic key data and producing disconnect data based, at least in part, on the analysis of the electronic key data and the status of ~~a piece of~~ the dangerous equipment; and
- locally controlling the operation of the ~~piece of~~ dangerous equipment based, at least in part, on the disconnect data.

09/938,227

01AB082

-
25. (Original) The method of claim 24, further comprising:
locally logging data associated with at least one of the collected electronic key data, the disconnect data and the dangerous equipment operation.
26. (Original) The method of claim 25, further comprising:
locally scheduling the operation of one or more pieces of dangerous equipment based, at least in part, on at least one of the logged data, the electronic key data and the disconnect data.
27. (Original) The method of claim 26, further comprising locally engaging in or more electronic data interchanges.
28. (Original) The method of claim 24 further comprising locally displaying at least one of technical manual data, schedule data, equipment identification data, equipment status information and safety manual data.
29. (Currently amended) A method for that electronically controlling a physical operation of dangerous equipment comprising:
collecting electronic key data;
centrally analyzing the electronic key data to produce disconnect data based, at least in part, on at least one of the electronic key data, the a status of one or more pieces of dangerous equipment, the a status of one or more pieces of related equipment and the an identity of the dangerous equipment; and
centrally controlling the operation of at least one of one or more pieces of dangerous equipment and one or more pieces of related equipment based, at least in part, on the disconnect data.
30. (Original) The method of claim 29, further comprising:
centrally logging data associated with at least one of the collected electronic key data, the disconnect data and the dangerous equipment operation.

09/938,227

01AB082

-
31. (Original) The method of claim 30, further comprising:
centrally scheduling the operation of at least one of one or more pieces of dangerous equipment and one or more pieces of related equipment based, at least in part, on at least one of the logged data, the electronic key data and the disconnect data.
32. (Original) The method of claim 31, further comprising centrally engaging in or more electronic data interchanges.
33. (Currently amended) The method of claim 32, further comprising centrally displaying at least one of technical manual data, schedule data, equipment identification data, equipment status information and safety manual data.
34. (Currently amended) A system ~~for that~~ electronically controlling ~~ing~~ a physical operation of dangerous equipment comprising:
means for reading electronic key data from an electronic key;
means for analyzing the electronic key data;
means for producing disconnect control data based, at least in part, on the electronic key data; and
means for disabling and re-enabling operation of ~~a piece of the~~ dangerous equipment, based at least in part on the disconnect control data; ~~and~~
~~means for re-enabling the operation of the piece of dangerous equipment, based at least in part on the disconnect control data.~~